

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as indicated below.

[0006] In the conventional reticle fabrication method, the EB write data 103 that has been generated through data conversion in the first data conversion device 102 is input to the EB writing device 104 without undergoing an inspection process and the figure pattern is written on the unwritten reticle 105. Even in case where a data conversion error has occurred, generating an erroneous EB write data 103, in the first data conversion device 102, therefore, the data conversion error cannot be detected in the EB writing device 104 before writing the figure pattern on the unwritten reticle 105. Even in case where a defect on the developed reticle 107 is detected in the inspection process in the reticle inspection device 110, it is extremely difficult to determine whether the defect is originated from a conversion error occurred in the first data conversion device 102 or occurred in the second data conversion device 108, or to determine whether the defect is a fabrication defect generated in the writing process or in the developing process. The reticle inspection device 110 detects if ~~[[thee]]~~ there is a defect in the figure pattern formed on the developed reticle 107 by comparing a to-be-inspected image acquired from the figure pattern formed on the developed reticle 107 with a reference image generated from the inspection data 109. When a mismatch between the to-be-inspected image and the reference image is detected, ~~therefore~~, it is necessary to start with the work of checking if the EB write data 103 contains a data conversion error in order to find a cause for the mismatch. In case where a data conversion error is detected, it is necessary to correct the data conversion in the first data conversion device 102 and regenerate the EB write data 103. This makes the read time for fabrication of a reticle considerably longer.

[0033] Figs. 5A through 5D are diagrams showing examples of data at individual sections in the data verification device 8 shown in Fig. 4. Because the EB write device 4 differs from the reticle inspection device 7 in the device structure and characteristic, the EB write data 3 and the inspection data 6 which are data converted from the same CAD data and including the same figure information but have figure patterns of different expression forms are respectively input to the EB write device 4 and the reticle inspection device 7. Specifically, the EB write data 3 in Fig. 4 is input to the data verification device 8 as data constructed by the combination of a plurality of rectangles, trapezoids and parallelepipeds as shown in Fig. 5A while the inspection data 6 in Fig. 4 is input to the data verification device 8 as data constructed by the combination of a single rectangle and a plurality of trapezoids as shown in Fig. 5C. To accurately compare the EB write data 3 and the inspection data 6, converted to figure patterns of different expression forms, with each other, therefore, those data are converted to raster images of the same expression form in the data verification device 8. Fig. 5B shows an example of the first raster image 22 which is generated by data conversion of the EB write data 3 as shown in Fig. 5A in the first raster image generating section 21. In the first raster image 22 shown in Fig. 5B, the hatched area is a figure area to be written on a reticle with an EB and portions indicated by marks "X" at the outer edge portions of the hatched area are those to be written in different tones with an EB. Fig. 5D shows an example of the second raster image 24 which is generated by data conversion of the inspection data 6 as shown in Fig. 5C in the second raster image generating section 23. Because ~~[[those]]~~ the first raster image 22 and second raster image 24 have the same expression form, they can be compared with each other easily by the image comparison section 25.

[0035] Figs. 7A through 7D are diagrams showing examples of data at individual sections in the data verification device 8 shown in Fig. 6. As in the example shown in Fig. 4 and Figs. 5A-5D, the EB write data 3 in Fig. 6 is input to the data verification device 8 as data constructed by the combination of a plurality of rectangles, trapezoids and parallelepipeds as shown in Fig. 7A while the inspection data 6 in Fig. 6 is input to the data verification device 8 as data constructed by the combination of a single rectangle and a plurality of trapezoids as shown in Fig. 7C. To accurately compare the EB write data 3 and the inspection data 6, converted to figure patterns of different expression forms, with each other, therefore, those data are converted to polygonal figure set information of the same expression form in the data verification device 8. Fig. 7B shows the first polygonal figure set 32 which is generated by data conversion of the EB write data 3 as shown in Fig. 7A in the first figure synthesizing section 31. Fig. 7D shows the second polygonal figure set 34 which is generated by data conversion of the inspection data 6 as shown in Fig. 7C in the second figure synthesizing section 33. As [[those]] the first polygonal figure set 32 and second polygonal figure set 34 have the same expression form, a sequence of coordinates of the vertexes of one synthesized figure can be easily compared with a sequence of coordinates of the vertexes of the other synthesized figure by figure comparison section 35.